IN THE CLAIMS:

Please cancel claims 1-16, 25, 32, 34-37 and 39-40; amend claims 17-22, 24, 26, 27, 30 and 31, and add new claims 41-44 as follows.

This listing of claims will replace all prior versions, and listings of the claims in the application.

1-16. (Canceled)

17. (Currently Amended) A method for stimulating angiogenesis in a subject who has an muscle injury, comprising the step of:

injecting into ~~a~~ muscle tissue of the injured muscle of the subject an isolated nucleic acid expression construct; wherein~~;~~ the muscle tissue comprises cells; and

the isolated nucleic acid expression construct comprises:

a myogenic promoter;

a nucleic acid sequence encoding an insulin-like growth factor I ("IGF-I") or functional biological equivalent thereof, wherein the ~~IGF-I or~~ functional biological equivalent has an amino acid sequence that is at least 85% identical to SEQ ID No.: 4 and retains the biological function of stimulating angiogenesis in muscle tissue~~is capable of binding to an IGF-I receptor ("IGF-IR")~~; and

a 3' untranslated region (3'UTR);

wherein the isolated nucleic acid expression construct is substantially free from a viral backbone; and

the myogenic promoter, the nucleic acid sequence encoding IGF-I, and the 3'UTR are operably linked; ~~thereby delivering to the~~ whereby cells of the muscle tissue of the injured muscle of the subject take up the isolated nucleic acid expression construct ~~that enables an in vivo expression activity for~~ and IGF-I or functional biological equivalent thereof is expressed, and ~~the encoded IGF-I or functional biological equivalent thereof stimulating~~ angiogenesis is stimulated in the muscle tissue of the injured muscle of the subject.

18. (Currently Amended) The method of claim 17, ~~further comprising selecting~~ wherein the myogenic promoter comprises a nucleic acid sequence that is at least 85% identical to SEQID No.: 3 and retains a myogenic promoter activity.

19. (Currently Amended) The method of claim 17, ~~further comprising selecting~~ wherein the isolated nucleic acid expression construct comprises a nucleic acid sequence encoding ~~the encoded~~ IGF-I ~~or functional biological equivalent thereof has an amino acid sequence that is at least 85% identical to SEQID No: 4 and retains the function of stimulating angiogenesis in the muscle tissue of the subject~~.

20. (Currently Amended) The method of claim 17, ~~further comprising selecting~~ wherein the isolated nucleic acid expression construct comprises a nucleic acid sequence encoding a ~~the encoded IGF-I or~~ functional biological equivalent ~~thereof has an amino acid sequence of SEQID No: 4, or SEQID No.:4 with conservative amino acid substitutions~~ of IGF-I, wherein the functional biological equivalent has an amino acid sequence that is at least 85% identical to SEQ ID NO.: 4 and retains the function of stimulating angiogenesis in ~~the~~ muscle tissue. ~~of the subject.~~

21. (Currently Amended) The method of claim 17, ~~further comprising selecting~~ wherein the 3'UTR comprises a nucleic acid sequence that is at least 85% identical to SEQID No.: 5 from a skeletal alpha actin gene, or at least 85% identical to SEQID No.: 6 from a human growth hormone gene and retains 3'UTR activity.

22. (Currently Amended) The method of claim 17, further comprising: mixing the isolated nucleic acid expression construct with a transfection-facilitating system before delivering the isolated nucleic acid expression construct into the muscle tissue of the injured muscle of the subject.

23. (Previously Presented) The method of claim 22, wherein the transfection-facilitating system is a liposome, or a cationic lipid.

24. (Currently Amended) The method of claim 17, ~~further comprising selecting~~ wherein the isolated nucleic acid expression construct comprises a ~~construct~~ nucleic acid sequence that is at least 90% identical to SEQ ID NO.:1~~SeqID#1~~, and encodes IGF-I or a functional biological equivalent thereof that has an amino acid sequence that is at least 85% identical to SEQ ID NO.: 4~~or a degenerate variant of SEQID#1~~ and retains the function of inducing angiogenesis in ~~the~~ muscle tissue. ~~of the subject.~~

25. (Canceled)

26. (Currently Amended) The method of claim 17, wherein ~~a~~ the isolated nucleic acid expression construct comprises ~~nucleic acid sequence is~~ Seq. ID No. 1.

27. (Currently Amended) The method of claim 17, further comprising mixing the isolated nucleic acid expression construct with an effective concentration of a transfection-facilitating polypeptide before delivering the isolated nucleic acid expression construct into the muscle tissue of the injured muscle of the subject.

28. (Original) The method of claim 27, wherein the transfection-facilitating polypeptide comprises a charged polypeptide.

29. (Original) The method of claim 27, wherein the transfection-facilitating polypeptide comprises poly-L-glutamate.

30. (Currently Amended) The method of claim 17, further comprising electroporating the injured muscle tissue after the nucleic acid expression construct has been delivered into the muscle tissue of the injured muscle of the subject.

31. (Currently Amended) The method of claim 17, wherein the nucleic acid expression construct is delivered into the muscle tissue of the injured muscle of the subject via a single administration.

32. (Canceled.)

33. (Original) The method of claim 17, wherein the cells of the tissue are diploid cells.

34-37. (Canceled.)

38. (Original) The method of claim 17, wherein the subject is a human, a pet animal, a farm animal, a food animal, or a work animal.

39-40. (Canceled)

41. (New) The method of claim 17, wherein the myogenic promoter SEQ ID No.: 3.

42. (New) The method of claim 17, wherein the 3'UTR comprises SEQ ID No.: 5 or SEQ ID No.: 6.

43. (New) The method of claim 19, further comprising the step of: electroporating the muscle tissue of the injured muscle after the nucleic acid expression construct has been delivered into the muscle tissue of the injured muscle of the subject.

44. (New) The method of claim 20, further comprising the step of: electroporating the muscle tissue of the injured muscle after the nucleic acid expression construct has been delivered into the muscle tissue of the injured muscle of the subject.